KT-CT.3# - RESERVE TREES *(09/2004)*

Notwithstanding the designations for cutting under CT.3.1, CT.3.2, CT.3.3, or CT.3.4, live or dead **Trees described in KT-CT.3.5.2# Tree Designation Table as SHALL NOT CUT are** reserve trees or groups of reserve trees within such cutting units or clearings shall be left uncut. Such Reserve trees are identified by **Description** and shall be protected in accordance with KT-GT.3.2#. Units with reserve trees are shown on Contract Area Map.

KT-CT.3.5.2# - DESIGNATION BY SPECIES AND DIAMETER *(09/2004)*

Trees that meet Utilization Standards are designated for cutting, as shown on the Tree Designation Table and Sale Area Map, except trees Marked with **Orange** paint or described to be left uncut.

See Tree Designation Table.

Additional trees to be cut, if any, are Marked with **Blue** paint.

All **N/A** shall be left as leave trees, unless Marked with **N/A** paint. Leave **N/A** trees of the designated cut species, **N/A** inches stump diameter or greater, to avoid leave tree spacing greater than **N/A** feet. Cutting unit boundaries and other trees that shall be left uncut are Marked with **Orange** paint.

Distances are measured horizontal distance, outside bark stump height to outside bark stump height. Stump diameter is measured outside bark at stump height in a horizontal and is the average of a measurement across the short axis through the true center of the stump and a second measurement at right angles to the short axis.

Contractor and Forest Service shall agree to skid trail location under BT6.422. Skid trails shall be no greater than **10** feet wide with a **150** foot spacing. Quantities of trees located in skid trails **are** Included Timber under AT2.

Contract Name: 403F Rd Hazards

KT-FT.1.2# - USE OF ROADS BY CONTRACTOR *(09/2004)*

Contractor's use of existing roads identified on Contract Area Map by the following codes is prohibited or subject to restrictive limitations, unless agreed otherwise:

Code	Use Limitations
X	Hauling prohibited
R	Hauling restricted
U	Unsuitable for hauling prior to completion of agreed reconstruction
P	Use prohibited
A	Public use restriction
W	Regulation waiver

Roads coded A will be signed by the Forest Service to inform the public of use restrictions. Contractor's use of roads coded R, A, or W shall be in accordance with the following restrictions:

See Restricted Road List Table.

Contract Name: 403F Rd Hazards

KT-FT.3.1# - ROAD MAINTENANCE REQUIREMENTS *(09/2004)*

Contractor shall maintain roads in accordance with the following Contract Road Maintenance Requirements Summary:

See Contract Road Maintenance Requirements Summary Table.

Contract Name: 403F Rd Hazards

KT-FT.3.2# - ROAD MAINTENANCE DEPOSIT SCHEDULE *(09/2004)*

Other provisions herein notwithstanding, when Forest Service requests payment in lieu of Contractor's performance of road maintenance, Contractor shall make Required Deposits (16 USC 537) for current and/or deferred road maintenance. Such deposits are based on the estimated volume and distance hauled and Contractor's commensurate use of each road listed in the Road Maintenance Plan in KT-FT.3.1#.

Contractor and Forest Service may agree in writing on adjustment of such rates. If Contractor uses roads under jurisdiction of Forest Service other than those listed in the Road Maintenance Plan, Forest Service shall establish rates commensurate with Contractor's use of such roads.

The Required Deposits for Forest Service work in lieu of Contractor performance and for deferred maintenance is: **$.27** per **CCF** .

The following table lists who Contractor will make deposits for road maintenance to, and the rate per unit of measure of the deposit. The Road Maintenance Agreement is available for inspection at the Forest Supervisor's Office.

Deposit Made To	Rate	Unit of Measure
N/A		

KT-FT.4.1 - SNOW REMOVAL *(05/2008)*

Snow removal shall be done in a manner to preserve and protect the roads, to the extent necessary, to insure safe and efficient transportation of timber and to prevent erosion damage to roads, streams, and adjacent lands.

1. Description. Snow removal work by Contractor shall include:

a. Removal of snow from entire road surface width including turnouts.
b. Removal of snow slides, earth slides, fallen timber, and boulders that obstruct normal road surface width.
c. Removal of snow, ice, and debris from ditches and culverts so that the drainage system will function efficiently at all times.

2. Performance. All items of snow removal shall be done currently as necessary to ensure safe, efficient transportation. Work shall be done in accordance with the following minimum standards of performance. Waivers of standards will not be given where circumstances will cause unacceptable and unavoidable damage to the road or other resource.

a. Removal of material. All debris, except snow and ice, that is removed from the road surface and ditches shall be deposited away from stream channels at agreed locations.
b. During snow removal operations, banks shall not be undercut nor shall gravel or other selected surfacing material be bladed off the roadway surface.
c. Ditches and culverts shall be kept functional during and following roadway use.
d. Snow berms shall not be left on the road surface unless written waivers are made for specific locations for traffic safety. Berms left on the shoulder of the road shall be removed following hauling completion and/or drainage holes shall be opened and maintained. Drainage holes shall be spaced as required to obtain satisfactory surface drainage without discharge onto erodible fills.
e. Dozers shall not be used to plow snow on system roads without written approval of Forest Service.
f. Snow shall not be removed to the road surface. A minimum two-inch depth must be left to prevent loss of surfacing and protect the road bed during snow removal operations. Written waivers may be made by Forest Service for specific locations where snow may be completely removed during plowing for traffic safety. Locations receiving a waiver will have a written agreement prepared prior to plowing that prescribes the timing and method of damage repair or surface replacement.

KT-GT.3.2# - PROTECTION OF RESERVE TREES *(09/2004)*

Contractor¿s damage or destruction of reserve trees described in KT-CT.3# will cause serious and substantial silvicultural or other damage to the National Forest. It will be difficult if not impossible to determine the amount of such damage. Therefore, Contractor shall pay as fixed, agreed, and liquidated damages $ **10** for each **Designation** reserve tree and $ **N/A** for each **N/A** reserve tree damaged or destroyed by Contractor's Operations, in addition to amounts payable under DT.4.4 and DT.4.5.

Damage, as used herein, includes any injury to the living crown, bole, or roots of reserve trees. If areas are marked on the ground around such reserve trees, operation of heavy equipment or skidding of products within the area shall be considered to be damage to the tree.

KT-GT.4# - CONDUCT OF LOGGING *(07/2009)*

Unless otherwise agreed to in writing, Silvicultural prescriptions and land management objectives shall be conducted and accomplished by the requirements, methods and proceedures in accordance with the following table.

KT-GT.4# - CONDUCT OF LOGGING

Contract Name: 403F Rd Hazards

KT-GT.6 - EROSION PREVENTION AND CONTROL *(05/2008)*

Unless waived in writing, erosion prevention and control work, required by GT.6 shall be completed within 15 calendar days after skidding operations related to each landing are completed or after Forest Service designation on the ground of work where such designation is required hereunder. Said time limit shall be exclusive of full days lost in Contractor's Operations due to causes beyond Purchaser's control. Damage resulting from Contractor's operations, due to failure to perform required work, shall be repaired by Contractor.

When not adequately protected from erosion by treatments such as out-sloping and cross draining or grass seeding, place lopped slash and logging debris in temporary roads, landings and skid trails.

KT-GT.6.0.1# - EROSION CONTROL SEEDING *(05/2008)*

Following completion of skidding and yarding operations in an area, Contractor shall seed areas of exposed soil on skid trails, landings, firebreaks, and Temporary Roads where other erosion control measures described in GT.6 will not result in satisfactory control of soil movement. Seed bed preparation shall consist of surface scarification on roads and landings sufficient for retention of seed.

Seed shall be broadcast evenly at the rate of **19** pounds of seed per acre. Application shall be during the period **WITHIN 15 DAYS AFTER USE OF SKID TRAIL OR LANDING IS NO LONGER NEEDED** unless otherwise approved. No application work shall be done during extremely windy or rainy weather, or when the ground is frozen or otherwise unsuitable.

The kinds and amounts of seed to be sown in terms of live pure seed shall be:

See Table A

Contract Name: 403F Rd Hazards

KT-GT.6.0.2 - TEMPORARY ROAD AND LANDING SCARIFICATION *(05/2008)*

Unless waived in writing by Forest Service on specific roads or landings, all landings and Temporary Roads constructed or used by Contractor shall be scarified by Contractor following use. Scarification shall be done to a depth of not less than four inches and must effectively prepare the ground for seeding.

KT-GT.7# - SLASH TREATMENT *(05/2008)*

All vegetative debris associated with construction of Specified Roads such as unutilized timber, brush and grubbed stumps is Construction Slash. Measures to be taken by Contractor for treatment of Construction Slash are set forth in the attached road construction specifications and in item (1) below.

Vegetative debris larger than 1 inch in diameter and 3 feet long resulting from Contractors Operations, other than Construction Slash, is Logging Slash. In Required Disposal Strip along permanent roads, in areas of Temporary Road construction outside of Clearcutting Units, and in fuelbreaks (KT-GT.7.1), both hardwood trees and coniferous trees smaller than the minimum d.b.h. in AT.2, over 3 feet in height and damaged beyond recovery by Contractors Operations shall be cut and treated as Logging Slash. Measures to be taken by Contractor for treatment of Logging Slash are set forth below and in following Subsections unless otherwise agreed in writing.

Forest Service and Contractor shall jointly develop a schedule for completion of slash treatment on the various portions of Sale Area prior to Contractor¿s Operations. Slash treatment plan may be made a part of the annual operating plan required in GT.3.1.

Specified slash treatment methods for each cutting unit shall be shown on Sale Area Map and listed in the attached tables by the following symbols:

Slash Treatment Methods:

Method: BURYING Map Symbol: "Bury"

Definition and Specifications:

Logging Slash shall be buried where agreed in borrow areas, pits, trenches, or other locations reasonably near the area of origin. Logging Slash shall be matted down in layers and shall be covered with at least 2 feet of rock and soil so that the final surface is sloped to drain and relatively smooth.

Method: CHIPPING Map Symbol: "Chip"

Definition and Specifications:

Chippable Logging Slash up to 4 inches in diameter shall be processed through a chipping machine. Chips shall be scattered to a depth not exceeding 6 inches.

Method: REMOVING Map Symbol: "Remove"

Definition and Specifications:

Logging Slash shall be moved or hauled to locations shown on Sale Area Map and designated on the ground where it shall be piled.

Method: FELLING DAMAGED TREES Map Symbol: "Fell"

Definition and Specifications:

Damaged or destroyed trees are trees substandard because of size, which are over 3 feet in height, and/or species not included in AT.2 over 3 feet in height, knocked down or damaged to the extent that mortality or serious deterioration will occur, and such trees partially pushed over so as to result in permanent lean and visible damage to the root system, all as a result of the Contractors operation. Such damaged or destroyed trees shall be felled and further treated by the slash treatment method specified for the area. Materials meeting the minimum piece specifications of AT.2 will be utilized by the Contractor according to

CT.2. Maximum stump height shall be that specified in AT.6 or on the Contract Area Map.

Method: BUCKING & PILING (Small Material) Map Symbol: "Buck"

Definition and Specifications:

Logging Slash smaller than **N/A** inches and larger than 4 inches in large end diameter shall be bucked into lengths not to exceed **N/A** feet and left in place. Logging Slash 4 inches and smaller in large end diameter shall be hand Piled within Required Disposal Strip.

Method: DECKING LARGE MATERIAL Map Symbol: "Deck"

Definition and Specifications:

Logging Slash **1/ inches in diameter and 1/** feet or more in length shall be Decked free of other slash by piling pieces parallel to each other.

Method: HAND PILING Map Symbol: "Hpile"

Definition and Specifications:

Logging slash smaller than **1/ inches in diameter and 1/** feet long shall be hand piled in accordance with the following specifications:

HAND PILING SPECIFICATIONS

LOCATION OF PILES: Piles shall be located within cleared areas of landings and Temporary Roads or within natural openings. The minimum spacing between edge of each pile and crown edge of adjacent live trees shall not be less than the average diameter of the pile.

Contractor shall not be required to move slash more than 75 feet to meet the above pile location requirement.

Piles shall not be made below high water mark of perennial or intermittent stream courses designated to be protected in accordance with GT.5. Slash shall not be piled on or allowed to remain in drainage ditches of permanent roads.

CONSTRUCTION OF PILES. Piles shall be compact and dirt-free, with most small slash on the bottom to facilitate consumption during burning. Piles shall not exceed 10 feet in average diameter and pile height shall not be less than one-third the average pile diameter. All slash which protrudes 4-feet or more from outer edge of the pile shall be bucked off and placed on pile.

Method: MACHINE PILING Map Symbol: "Mpile"

Definition and Specifications:

Concentrations of logging slash, excluding scattered individual pieces, shall be machine piled by tractor equipped with brush rake as per Machine Piling Specifications.

Method: MACHINE PILING & LOPPING Map Symbol: "Mpile/lop"

Definition and Specifications:

Concentrations of slash marked on the ground by the Forest Service shall be machine piled by a tractor equipped with a brush rake as per Machine Piling Specifications. The remaining slash, not in

concentrations, shall be lopped and scattered as per specification for "Lopping."

Machine Piling Specifications

Acceptable Equipment. Piling will be accomplished with a crawler tractor not to exceed overall width of **N/A** feet. Tractor will be equipped with a brush blade having teeth extending a minimum of 11 inches below the frame. The teeth shall number at least **7 and no more than 10** . The teeth shall be of sufficient size and strength so that they shall not bend or break through normal slash piling.

Location of Piles. Piles shall be so located that burning will not damage standing live trees or physical improvements such as fences, poles, buildings, signs, tables, grills, and cattleguards. The minimum spacing between piles shall be equivalent to one and one-half the diameter of the adjacent pile.

If conditions make it impractical to locate piles where damage to live trees and physical improvements can be avoided, a space shall be cleared in a location designated by Forest Service.

Slash within partial cut areas and road construction clearings shall be moved to take advantage of previously constructed or natural clearings in order to minimize the construction of new clearings. Slash shall not be moved more than 120 feet to achieve the location requirement. Piles shall not be made on permanent roads, in drainage ditches, below high water marks of live streams, and in intermittent stream courses.

Piles shall not be constructed within a **50 foot strip along the tip edge of the cutting unit or within a 50** foot strip along the remaining edges of the unit.

Construction of Piles. Machine piles shall be compacted by pushing slash from all sides towards the center of the pile. A machine pile will not exceed an average diameter of 25 feet and pile height shall not be less than one-third the average diameter of the pile. All slash which protrudes 4-feet or more from outer edge of the pile shall be bucked off and placed on pile.

Unmerchantable material may be left between piles to protect regeneration seedlings and for site protection purposes as specified in writing by Forest Service.

Piling shall be accomplished in a manner that will prevent the accumulation of dirt in the piles

Logs and tops from felled trees within leave groups of trees inside or outside the cutting unit shall be yarded out of such leave groups to approved locations and piled. Where there is danger of damaging leave trees, long material shall be end-lined out of leave groups.

Method: COVERING PILES Map Symbol: "Cover"

Definition and Specifications:

All slash piles shall be covered with a durable waterproof covering furnished by Contractor as approved by the Forest Service. The material shall be at least 6 feet in width. Piles shall not be less than one-third covered, with the covering extending not less than halfway down all sides. Pieces of burnable material shall be placed on top of the waterproof covering to keep it from blowing off the pile.

Method: SITE PREPARATION Map Symbol: "Mach"

Definition and Specifications:

In conjunction with machine slash piling, a minimum of **N/A percent and maximum of N/A** percent of the workable ground surface uniformly distributed over the unit area shall be scarified down to bare mineral soil. Scarified ground is here defined as bare mineral soil in patches exceeding **N/A feet by N/A** feet.

Method: SCATTERING Map Symbol: "Scat"

Definition and Specifications:

Contractor shall remove all slash greater than **N/A inches in diameter and/or N/A** feet long, a minimum of **N/A feet away from each leave tree N/A** inches d.b.h. and larger. Slash shall be placed upslope from, or along the upslope from, or along the contour from, leave trees. Slash shall not be placed down slope from leave trees.

Method: LOPPING Map Symbol: "Lop"

Definition and Specifications:

Slash shall be treated by limbing or severing, or both, and scattered as necessary to place slash within **3/** feet of the ground over entire area of cutting unit. Occasional slash which exceeds the maximum height, not to exceed 5 percent of slash to be lopped and scattered, is acceptable. When agreed in writing between Contractor and Forest Service, crushing or chopping with mechanized equipment is permissible, where residual trees will not be excessively damaged and ground conditions are suitable.

By agreement in writing, certain slash may be left for fuelwood. When the specified treatment is by a combination of methods, Logging Slash not treated by one of the methods shall be treated by the other(s).

(1) Treatment Along Permanent Roads. Permanent roads that require roadside slash treatment are listed in the attached table and shown on the Contract Area Map. All Logging and Construction Slash within Required Disposal Strips shall be treated by Contractor. "Required Disposal Strips" are those areas adjacent to permanent roads where slash treatment is required for resource objectives. The width of Required Disposal Strips is shown in the attached table and is measured in slope distance from Roadbed edges of permanent roads. By agreement, in Clearcutting Units, slash from Required Disposal Strips may be treated with other Logging Slash. By agreement, the location of Required Disposal Strips may be adjusted from side to side without materially changing the total work required.

Slash treatment in Required Disposal Strips shall be accomplished without affecting the proper functioning of channels leading to and from drainage structures.

(a) Slash shall be treated by Scattering, Removing, Burying, Chipping, Piling, Bucking and Piling, Machine Piling or a combination of these methods as shown in the attached table. Logging Slash larger than treatment size requirements of the specified method shall either be Scattered outside Required Disposal Strip, within Required Disposal Strip or Decked at agreed locations as shown in the attached table.

(b) Hardwood and coniferous trees within or extending over Required Disposal Strips and which have been partially knocked down by Contractor¿s Operations shall be felled and treated as Logging Slash. Damaged trees which cannot be felled with reasonable safety may be pushed or pulled down.

(2) Treatment Along Temporary Roads. Outside of Clearcutting Units, all hardwood and coniferous trees felled or pushed over and trees damaged beyond recovery by Temporary Road construction shall be felled, limbed to a stem diameter of approximately 3 inches, at which point the top shall be cut from the remainder of the stem, and stem shall be bucked into lengths not exceeding **4/** feet. Such slash shall be Scattered free of soil to reduce concentrations unless treatment is required by another specified method.

(3) Landings and Disposal Sites. Unutilized logs accumulated at landings and disposal sites shall be Decked by Contractor. Other slash accumulated at landings and disposal sites shall be kept separate from unutilized logs and treated by the method shown in the attached table.

(4) View and Special Management Units. Areas identified as "VIEW" on the Contract Area Map are Travel and Water Influence Zones and Special Management Units which include roads, recreation trails, streamsides,

lakeshores, and other view areas. The "VIEW" boundaries are identified on the ground or a distance limitation is specified on the Contract Area Map. Primary treatment shall be by Removing, Burying, Chipping, Hand Piling, Machine Piling, or a combination of these means unless a method is specified or prohibited on Sale Area Map. Logging Slash not readily treated by the selected or specified method shall be removed to designated areas or treated as agreed.

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The following tables, where applicable and filled in, summarize slash requirements:

TREATMENT ALONG PERMANENT ROADS (KT-GT.7#)
SLASH TREATMENT

See Table A

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LANDING, DISPOSAL SITES AND OTHER SLASH (KT-GT.7#)

See Table B

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CONTRACTOR UNIT SLASH RESPONSIBILITY (KT-GT.7#)

See Table C

Contract Name: 403F Rd Hazards

KT-GT.8 - MEASURING *(05/2008)*

Volume estimators used for quantity esimates in AT.2 are listed below. Volume for trees added pursuant to CT.1 and CT.3, or other authorization hereunder, will be derived from the same volume estimators or from volume tables based on these estimators.

SPECIES	DATA SOURCE	APPLICATION
Ponderosa Pine	Eagar Recovery Study 1/	All Forests
Aspen	Santa Fe/Carson 2/	All Forests
Spruce	Santa Fe/Carson/Lincoln 2/	All Forests
Corkbark Fir	Santa Fe/Carson/Lincoln 2/	All Forests
SW White Pine	Santa Fe/Carson/Lincoln 2/	All Forests
Douglas-Fir	Santa Fe/Carson 2/	Carson, Cibola, Kaibab, Santa Fe
Douglas-Fir 3/	Lincoln/Tonto 2/	Apache-Sitgreaves, Coconino, Coronado, Gila, Lincoln, Prescott, Tonto
White Fir	Lincoln 2/	Apache-Sitgreaves, Coconino, Coronado, Gila, Lincoln, Prescott, Tonto
White Fir	Santa Fe/Carson 2/	Carson, Cibola, Kaibab, Santa Fe

1/ Ponderosa Pine volume estimators are derived from data collected in the Eagar Mill Recovery Study. Scribner Decimal C and cubic volume estimators are available from the Forest Supervisor or District Ranger.

2/ These volume estimators and tables are published in the following documents:

Hann, David W. and B. Bruce Bare "Comprehensive Tree Volume Equations for major Species of New Mexico and Arizona: I. Results and methodology", USDA Forest Service research Paper INT-209, June 1978, 43 pp.

Hann, David W. and B. Bruce Bare "Comprehensive Tree Volume Equations for major Species of New Mexico and Arizona: II. Tables for Unforked Trees" USDA Forest Service Research Paper INT-210, November, 1978, 127 pp.

3/ Based on data obtained in the Fiscal Year 1987 Douglas-fir Volume Validation Project, predicted Douglas-fir Scribner Board Foot volume (from Hann and Bare equations using the Lincoln/Tonto Data Source) must be adjusted (multiplied) by a factor of 0.932. This is the equivalent of a 6.8% negative adjustment to the predicted volume.

KT-GT.8.2 - ACCOUNTABILITY *(05/2008)*

Unless otherwise agreed in writing and prior to hauling from Sale Area, products shall be accounted for as follows:

The truck driver shall obtain a removal receipt furnished by Forest Service. Contractor shall assign a competent individual at the landing to issue removal receipts for products removed from Sale Area. A duplicate copy or stub of such receipt shall be retained by Contractor and delivered to Forest Service at periodic intervals. When products are in transit, the truck driver shall keep the original copy of the receipt in his possession and show it upon request or display it as evidence of his authority to remove products. The original removal receipt shall be surrendered at the unloading point or as requested by Forest Service.

KT-GT.9# - STEWARDSHIP PROJECTS *(09/2004)*

Performance of stewardship projects shall be in accordance with the following specifications.

Stewardship Projects

Contract Name: 403F Rd Hazards

KT-HT.2 - SPECIFIC FIRE PRECAUTIONS *(05/2008)*

Contractor shall provide the personnel, tools and equipment to take the following precautionary measures:

SMOKING AND LUNCH FIRE RESTRICTIONS

Contractor shall prohibit smoking and building of camp and lunch fires by persons engaged in Contractor¿s operations, except at established camps or in areas that Forest Service may designate. Smoking may be permitted at these designated areas only after all flammable material has been cleared to mineral soil. All fires and smoking materials shall be completely extinguished at end of lunch or smoking period.

FIRE TOOLS

Contractor shall furnish and maintain; i.e., cutting edges sharp, handles sanded and tightly fitted, clean of rust and foreign material; fires tools to be used only for suppressing forest fires. Each logging operation shall be provided with one firefighting tool per man to equip 100 percent of the personnel engaged in Contractors operations. Approved firefighting tools are: double-bit axe; brushhook; pulaski; McLeod; and round-pointed, size 0 or larger lady shovel. The proper tool mix will be stipulated in the Timber Sale Fire Plan. These tools are required separate from, and in addition to, the tools required in the section, "Fire Tools on Equipment," and in KT-HT.2.1 Fire Guards. Fire tools for firefighting purposes for use of personnel engaged in all phases of the logging operations shall be located in the active operating area of the contract or as stated in the fire plan.

BURNING OF REFUSE

No camp refuse of slash or other debris, such as that resulting from clearing around camps or on right-of-way, shall be burned without the written consent of the Forest Service.

SPARK ARRESTERS AND MUFFLERS

Each internal combustion engine shall be equipped with a spark arrester qualified and rated under USDA Forest Service Standard (Spark Arrester Guide) 5100-1a or the latest revision of Society of Automotive Engineers "medium size engine, SAE recommended practice J350" unless it is:

(a) Equipped with a turbine-driven exhaust supercharger such as the turbocharger. There shall be no exhaust bypass.

(b) A multi-position engine, such as on power saws purchased after 6/30/77 which must meet the performance levels set forth in the Society of Automotive Engineers "multi-positioned small engine exhaust fire ignition standard, SAE recommended practice J335B" as now or hereafter amended. Those purchased prior to the above date shall be equipped with an approved spark arrester/muffler containing a 0.023 inch mesh screen in good condition.

(c) A passenger carrying vehicle or light truck, or medium truck up to 40,000 GVW, used on roads and equipped with a factory designed muffler and an exhaust system in good working condition.

(d) A heavy duty truck, such as a dump or log truck, or other vehicle used for commercial hauling, used only on roads and equipped with a factory designed muffler and with a vertical stack exhaust system extending above the cab.

Exhaust equipment described in this Subsection, including spark arresters and mufflers, shall be properly installed and constantly maintained in serviceable condition.

POWERSAWS

During periods of use, each powersaw operator shall have readily available for use one long-handled round-pointed shovel and one chemical-pressurized fire extinguisher of not less than 8-ounce capacity by weight.

Muffler, extinguisher, and shovel shall be maintained in good working order at all times. Any fueling or refueling of a powersaw shall be done in an area which has been cleared of material which will carry fire. Powersaws shall be moved at least 10 feet from the place of fueling or refueling before starting.

FIRE TOOLS ON EQUIPMENT

Each internal combustion fuel carrying truck, loader, skidder, heavy truck, and tractor shall be provided with one long-handled round-pointed shovel, and one 5-pound capacity ABC dry chemical fire extinguisher. Passenger carrying vehicles, including light pickup trucks shall be equipped with one (1) long-handled round-pointed shovel and one (1) ABC chemical fire extinguisher not less than 2 1/2 pounds capacity. Shovels and fire extinguishers shall be so mounted as to be readily reached from the ground.

INSPECTION REQUIREMENTS FOR INTERNAL-COMBUSTION ENGINES

Each internal-Combustion motor vehicle or item of equipment shall be inspected and approved in advance of use by Forest Service.

Contractor shall require that all persons engaged in Contractor¿s operations submit all internal-combustion motors and equipment for inspection and approval prior to use in Contractor¿s operations on National Forest lands. Vehicles and equipment not approved for use shall be repaired to meet existing standards, re-inspected, and approved by Forest Service prior to use.

BLASTING

Use of fuses in blasting shall not be permitted. A long-handled round-pointed shovel and 5-gallon backpack pump with attached hand pump filled with water shall be available at all times. During periods when Fire Precaution Plan B or C is in effect, a fire guard shall remain on duty for at least one hour after blasting is finished and shall be equipped with a shovel and backpack. Blasting is prohibited under Fire Precaution Plan D. (KT-HT.2.2)

TRACTOR LIGHTS

All crawler tractors and rubber-tired skidders suitable for fire suppression work, and with power source, shall be equipped with two (2) factory type headlights and one (1) backup light, or brackets mounted for portable self-contained battery operated lights. These portable lights shall be furnished and maintained by the Contractor at a location agreed by the Forest Service.

CABLE YARDING

Tail and corner blocks shall be located to prevent cables from rubbing against trees, snags, and down logs. Areas adjacent to tail and corner blocks shall be cleared of flammable material within a 5-foot radius. One 5-gallon standard backpack water container (filled at all times and with hand pump attached), one shovel, and one pulaski, shall be maintained within 10 feet of each block.

GAS AND OIL STORAGE AND SERVICE AREAS

The location of equipment service areas and gas and oil storage areas shall be approved in writing by Contracting Officer. All areas shall be cleared of brush, litter, grass or other flammable debris for a radius of 50 feet.

WELDING

An area within a 10 foot radius shall be cleared down to mineral soil before welding operations are started. Prior to welding, Contractor shall have available a round-pointed long-handled shovel, a 5-gallon

backpack pump filled with water with attached hand pump, and a 5-pound fire extinguisher at each welding site. A fire guard will remain on duty for at least one (1) hour after welding is completed during periods when Fire Precaution Plan B or C is in effect. Welding is prohibited under Fire Precaution Plan D.

KT-HT.2.1 - FIRE GUARDS *(05/2008)*

Contractor shall designate at least one representative to train and supervise each woodsworking group of men in fire prevention, detection, and suppression. Each such representative shall be named in the fire plan.

To prevent, detect, and suppress fire, Contractor shall provide a trained fire guard at each operating area where power-driven equipment has been operated during the day. The fire guards shall constantly perform their duties during operating hours and for three (3) hours after the woodswork stops for the day, when the Fire Precaution Plan is Plan B, C, or D (KT-HT.2.2).

Fire guard service on one operating area shall satisfy the requirements on adjacent areas if the travel time with available transportation is not in excess of ten (10) minutes to any of the other areas requiring such service.

Each fire guard shall be physically able, vigilant, and trained to prevent, detect, and report any fires and to promptly and efficiently take suppression action with available required firefighting equipment and men on any fire that starts on contract area. Each fire guard shall be equipped with a vehicle and a fire tool cache consisting of a cache box, 2 four-to-five gallon backpack pumps filled with water, 2 size 0 shovels, 2 Pulaskis, and 2 McLeod tools maintained in serviceable condition.

KT-HT.2.2 - EMERGENCY FIRE PRECAUTIONS *(05/2008)*

Contractor will restrict operations in accordance with the attached Emergency Fire Precaution Schedule. When there is a predicted change, Forest Service shall inform the Contractor by 6:00 pm, Mountain Standard Time (7:00 pm MDT), of the predicted change in the Industrial Fire Precaution Plan. The procedure for the Forest Service to notify the Contractor of a change shall be stated in the Fire Prevention and Control plan required by HT.1. The Contracting Officer may, after consultation with the Forest Supervisor, adjust the predicted Industrial Fire Precaution Plan for local weather conditions on contract area. Changes in the predicted Industrial Fire Precaution Plan shall be agreed to in writing.

EMERGENCY FIRE PRECAUTION SCHEDULE
FIRE RESTRICTION/CLOSURE STAGE

STAGED RESTRICTION LEVELS	INDUSTRIAL FIRE PRECAUTION PLAN
NO RESTRICTIONS	A
STAGE I	B
STAGE II	C
STAGE III (PARTIAL FOREST CLOSURE) **	C or D
STAGE IV (TOTAL FOREST CLOSURE)	D
RED FLAG WARNING	D
(Issued by National Weather Service)	

** Partial Forest Closure:
Timber contract areas which are outside the boundaries of the partial forest closure may continue to operate under Industrial Fire Precaution Plan 'C' operating criteria as agreed upon between the CO and Contractor in writing. Timber sale areas within the boundaries of the proclaimed partial forest closure area are to operate under Industrial Fire Precaution Plan 'D'. Staged restriction levels are determined by the Line Officer in conjunction with Fire Management Officer(s) and Contracting Officer(s). The process is a mix of quantitative and subjective measures which allows Line Officers a broad level of discretion considering local conditions and issues when deciding to implement fire restrictions and/or area closures.

INDUSTRIAL FIRE PRECAUTION PLAN - DESCRIPTION
A - Normal Fire Precautions (KT-HT.2.1) No fire guard required.
B - Normal Fire Precautions except designated areas for smoking and warming or cooking fires require a written permit. Contractor will provide fire guard (KT-HT.2.1).
C - All power saws and mechanical fellers except for mechanical fellers equipped with hydraulic shears will shut down from 9:00 am until 8:00 pm Mountain Standard Time (10:00 am to 9:00 pm MDT), except chainsaws may be used from 9:00 am until 2:00 pm Mountain Standard Time (10:00 am to 3:00 pm MDT), for limbing on landings cleared to mineral soil. Loading is authorized to continue from 12:00 noon until 2:00 pm, Mountain Standard Time (1:00 pm to 3:00 pm MDT), on landings cleared to mineral soil. Log hauling trucks must be out of the contract area to a surfaced road by 2:00 pm, Mountain Standard Time (3:00 pm MDT). Shutdown from 12:00 noon until 8:00 pm Mountain Standard Time (1:00 pm to 9:00 pm MDT); all machine treatment of slash; mechanical equipment used for shearing, bunching, or delimbing; skidding; cable yarding; blasting; welding; metal cutting; and clearing. Operations on mineral soil involving road excavation, watering, grading, surfacing, rock crushing, and/or other equipment maintenance may continue. No smoking, warming or cooking fires are permitted at any time. Contractor will provide fire guard (KT-HT.2.1).
D - Shutdown all operations; except operations on mineral soil involving road excavation, watering, grading, gravel surfacing, and rock crushing may continue with special Forest Service permit. Contractor will provide fire guard (KT-HT.2.1).

KT-HT.2.3 - COMMUNICATIONS *(05/2008)*

Contractor shall furnish a serviceable telephone, radio-telephone or radio system connecting each operating side with Contractor's headquarters. A radio-equipped fire patrolman vehicle will satisfy this requirement if in operation during the time required. When such headquarters is at a location which makes communication to it clearly impractical, Forest Service shall accept a reasonable alternative location. The communication system shall provide prompt and reliable communications between Contractor's headquarters (or above stated alternative) and Forest Service via commercial or Forest Service telephone. The communications system shall be operable during Contractor's Operations in Fire Precautionary Period described in AT.9 and during the time fire patrolman service is required.

In the event no other means of communications will provide for prompt and reliable reporting of a fire, the Contracting Officer may allow use of a Forest Service two-way radio or Forest Service frequencies for emergency use only. The use of Forest Service frequencies will be by a written memorandum of agreement between the Contracting Officer and Contractor.

KT-IT.6.8#(Option 1) - USE OF TIMBER *(09/2004)*

(a) This contract is subject to the Forest Resources Conservation and Shortage Relief Act of 1990, as amended (16 USC 620, et seq.).

(b) Except for **none** determined pursuant to public hearing to be surplus, unprocessed Included Timber shall not be exported from the United States nor used in direct or indirect substitution for unprocessed timber exported from private lands by Contractor or any person as defined in the Act (16 USC 620e).

(c) Timber in the following form will be considered unprocessed:

(i) Trees or portions of trees or other roundwood not processed to standards and specifications suitable for end product use;

(ii) Lumber, construction timbers, or cants intended for remanufacturing not meeting standards defined in the Act (16 USC 620e); and

(iii) Aspen or other pulpwood bolts exceeding 100 inches in length.

(d) Unless otherwise agreed in writing, unprocessed Included Timber shall be delivered to a domestic processing facility and shall not be mixed with logs intended for export.

(e) Prior to award, during the life of this contract, and for a period of 3 years from Termination Date, Contractor shall furnish to Forest Service, upon request, records showing the volume and geographic origin of unprocessed timber from private lands exported or sold for export by Contractor or affiliates.

(f) Prior to delivering unprocessed Included Timber to another party, Contractor shall require each buyer, exchangee, or recipient to execute an acceptable agreement that will:

(i) Identify the Federal origin of the timber;

(ii) Specify domestic processing for the timber involved;

(iii) Require the execution of such agreements between the parties to any subsequent transactions involving the timber;

(iv) Require that all hammer brands and/or yellow paint must remain on logs until they are either legally exported or domestically processed, whichever is applicable; and

(v) Otherwise comply with the requirements of the Act (16 USC 620d).

(g) No later than 10 days following the execution of any such agreement between Contractor and another party, Contractor shall furnish to Forest Service a copy of each such agreement. Contractor shall retain, for 3 years from Termination Date, the records of all sales, exchanges, or dispositions of all Included Timber.

(h) Upon request, all records dealing with origin and disposition of Included Timber shall be made available to Contracting Officer.

(i) For breach of this Subsection, Forest Service may terminate this contract and take such other action as may be provided by statute or regulation, including the imposition of penalties. When terminated by Forest Service under this Subsection, Forest Service will not be liable for any Claim submitted by Contractor relating to the termination.